ZEOLOGY TANNING; COMPOSTABLE LEATHER AND BIODEGRADABLE WASTE

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Zeology is a new sustainable tanning chemistry based on zeolite and results in compostable leather plus biodegradable waste streams. The environmental impact of material production processes has never been more important and eco-benign products are of paramount importance. Both products and waste streams need to be considered for a circular economy approach, where each outlet stream serves as an input for another industry. The leather industry is an excellent example of how a by-product can be upgraded into a value-added material, such as leather. Zeology tanning offers the possibility of making compostable leathers for consumer products that at their end of life can be a used for input of soil enriching components. Leather can then again form a fully circular material for the future.

The key aspects of what differs Zeology tanning from standard tanning agents are also discussed, comparing to standard chrome, GDA and standard zeolite. The advantages of Zeology are that it is heavy metal free, safe to use product and robustness of application.

Keywords: Zeology, tanning, zeolite, circular, material, aluminosilicate, clay, waste, compostability